

## LOAN EXAMINATION METHOD AND LOAN EXAMINATION SYSTEM

### Background of the Invention:

#### 1. Field of the Invention:

5           The present invention relates to a scheme of an examination for lending or loaning money to an enterprise, and more particularly to a system and a method preferably applied to an examination business or the like in which a financial institution previously determines whether it can  
10 offer loan or financing.

#### 2. Background Art:

          When a financial institution finances an enterprise or settles a loan to the enterprise, it performs an examination in advance for determining whether it may  
15 offer the loan. In the loan examination, whether the loan can be offered is determined on the basis of information obtained from, for example, (1) inquiries from the financial institution to a company to be examined or an examinee and responses from the examinee to the inquiries,  
20 (2) data such as the financial statements already issued by the examinee, (3) exchanges of information on debts of the examinee between the financial institution and another financial institution, (4) assets of the examinee serving as collateral, and (5) visits of the financial institution  
25 to the examinee. The information is provided over a computer network, in the form of documents, by telephone,

through direct hearings or the like.

When the financial institution determines whether it can offer the loan requested by the examinee, it can refer only to (1) information generally released by the examinee, (2) information on the examinee substantially known to the financial industry, and (3) information provided for the financial institution by the examinee, of the aforementioned information.

Fig. 1 shows a scheme for a conventional loan examination. Referring to Fig. 1, financial institution 100 collects information by using financial accounting report 130 such as a financial statement of examinee 110 already released by examinee 110, putting directly questions to examinee 110 on a visit thereto and the like to determine whether financial institution 100 can finance examinee 110. In addition, financial institution 100 may visit business partner 120 of examinee 110 without notifying examinee 110 of the visit to check business situations.

In Fig. 1, financial accounting report 130 of examinee 110 is produced by examinee 110 on its own with the help of an auditor, accountant or audit corporation, and released to the outside after receipt of certification by the auditor or accountant in terms of accuracy and validity. Since financial accounting report 130 is produced and released at each term end, examinee 110

produces such a financial accounting report once a year or twice a year, that is, once in the first half and once in the second half of a year, or four times in a year, that is, every three months, depending on company accounting systems varying from one country to another. A financial statement for stock investors is an example of data readily obtained by financial institution 100 as specific data of financial accounting report 130 of examinee 110.

Fig. 2 illustrates a specific procedure of the conventional loan examination. Referring to Fig. 2, a company attempting to obtain financing, that is, examinee 110 makes a request for new loan to financial institution 100 such as a bank as required in business at step A1. Upon receipt of the request for loan, financial institution 100 inquires of examinee 110 which made the request about its actual conditions of management and asset status at step A2. At step A3, examinee 110 presents an already released financial accounting report of examinee 110, for example reports on securities, to financial institution 100. At step A4, examinee 110 responds to the inquiries at step A2 by holding an interview with a member of staff of financial institution 100, directly presenting data, or making a call.

In some cases, at step A5, financial institution 100 makes contact with business partner 120 of examinee 110 to inquire about uncertainties of the information

acquired at steps A3 and A4 for confirmation and verification of the information. At step A6, business partner 120 responds only to some items of the inquiries from financial institution 100 to which it wishes to respond.

Finally, at step A7, financial institution 100 determines whether it can offer the loan to examinee 110 by using the information obtained at step A3, A4 and A6 and public information, and notifies examinee 110 of the determination result.

In the conventional loan examination method, however, a problem exists in that the information which the financial institution can referred to at the loan examination is limited to the information generally released by the examinee, the information on the examinee substantially known to the financial industry, and the information provided by the examinee for the financial institution.

The financial institution which desires a more accurate loan examination wishes to obtain variable information in order to analyze the examinee from many aspects referring to business activities during a certain period, expected orders in the next term and the like, although it is difficult to thoroughly carry out that wish. In addition, there is only a poor method for checking whether the contents of the responses of the examinee to

the inquiries of the financial institution are true or not.  
Furthermore, in general, the examinee which is to apply  
for financing to the financial institution may hide weak  
points in the actual conditions of management of the  
5 company and exaggeratedly explain its strengths.

Since the conventional loan examination method also  
has a problem of being time-consuming due to the need of  
manpower to collect the necessary information.

The understanding of accurate and latest conditions  
10 of management of the examinee in the financial institution  
is required for realizing a more accurate finance  
examination by the financial institution.

#### Summary of the Invention:

15 It is an object of the present invention to provide  
a method which allows a financial institution to promptly  
perform a loan examination and enables improved accuracy  
of the loan examination.

It is another object of the present invention to  
20 provide a system which allows a financial institution to  
promptly perform a loan examination and enables improved  
accuracy of the loan examination.

In the present invention which achieves the  
aforementioned objects, information on business activities  
25 of an enterprise is collected on an ASP (application  
service provider) server from a terminal apparatus

provided in the enterprise through a network such as the Internet. An examiner such as a financial institution evaluates the activities of the enterprise based on the information accumulated on the ASP server to examine the enterprise. The examination typically is an examination for determining whether financing can be offered to the company.

The above and other objects, features, and advantages of the present invention will become apparent from the following description referring to the accompanying drawings which illustrate examples of preferred embodiments of the present invention.

#### Brief Description of the Drawings:

Fig. 1 is a schematic view for explaining a method of a conventional loan examination;

Fig. 2 is a flow diagram illustrating a specific procedure of the conventional loan examination;

Fig. 3 is a block diagram showing a configuration of a loan examination system according to a preferred embodiment of the present invention; and

Fig. 4 is a flow diagram illustrating operations of the system shown in Fig. 3.

#### Detailed Description of the Embodiments:

In a preferred embodiment of the present invention,

as shown in Fig. 3, terminal 200 is placed in a financial institution, terminal 210 is placed in an enterprise which wishes to obtain a loan, ASP (Application Service Provider) server 230 is operated by the financial institution or an entity holding a commission from the finance institution, and terminals 200, 210, and ASP server 230 are interconnected through network 220. The Internet, for example, is preferably used as network 220.

An enterprise which wishes to obtain a loan is referred to as "an examinee." Such examinees include corporations such as limited companies or corporations, unlimited companies or corporations, general partnerships, associations, medical corporations, eleemosynary corporations such as incorporated schools, and public corporations, and one-man businesses, depending on definitions in corporation laws, civil codes, and commercial laws in various countries.

In the embodiment, information on business activities of an enterprise which wishes to obtain a loan is transmitted from terminal 210 placed in the enterprise to ASP server 230 through network 220 and accumulated on ASP server 230. The accumulated information on business activities is transmitted to terminal 200 of an entity who is to evaluate the enterprise, for example an entity which is to offer loans, in response to a request from the entity. The entity which evaluates the enterprise

determines actions for the enterprise by evaluating the activities of the enterprise. When a loan examination is performed, the entity which evaluates the enterprise performs the loan examination based on the evaluation to  
5 determine whether the entity can offer the loan to the enterprise. One terminal 210 of the examinee may be provided for the examinee, or a plurality of terminals 210 may be provided for one examinee depending on the scale or the like of the examinee. Specifically, terminal 210 of  
10 the examinee may be provided for each office of the examinee, or each of departments such as a finance department, accounts department, sales department, and manufacturing department of the examinee.

In the present invention, ASP server 230 is  
15 preferably operated by the entity which evaluates the enterprise. The following description is made assuming that a financial institution itself sets up and operates ASP server 230. ASP server 230 is not open to third parties except the enterprise and the entity which  
20 evaluates the enterprise.

A procedure of a loan examination based on the present invention includes the steps of:

recording information on business activities of the examinee on the ASP server from the terminal placed in the  
25 examinee;

appending, updating, deleting, viewing the



information on business activities recorded on the ASP server by the terminal of the examinee;

transmitting a request for loan from the terminal of the examinee to the terminal of the financial

5 institution;

acquiring the information on business activities of the examinee stored on the ASP server from the terminal of the financial institution; and

determining whether the loan can be offered to the  
10 examinee based on the information on business activities of the examinee stored on the ASP server and notifying the terminal of the examinee of the determination result.

A company typically creates a database for managing finance, accounting, marketing, manufacturing and the like  
15 of the company. In recent years, the operation of the database for managing finance, accounting, marketing, manufacturing and the like is often committed to an external ASP as part of outsourcing of peripheral activities in the company. Thus, in the present  
20 embodiment, a financial institution and the like sets up and operates the ASP server to undertake the database management of finance, accounts, marketing, manufacturing and the like of the examinee as well as perform a loan examination based on information on business activities of  
25 the examinee accumulated on the ASP server.

As a result, the financial institution uses the

latest information on various business activities of the  
examinee stored on the ASP server which would not be  
acquired conventionally as reference information, for  
example, to determine whether the financial institution  
5 settles loan to the company without releasing the  
information to third parties, thereby achieving improved  
accuracy of the loan examination. The information on  
business activities sent to the ASP server from the  
examinee includes, as an example, information on finance,  
10 accounts, marketing, manufacturing and the like of the  
examinee.

Description is hereinafter made for a loan  
examination system of the embodiment in detail.

Terminal 200 of the financial institution includes  
15 request section 201, information receipt section 202,  
request receipt section 203, and sending section 204.  
Request section 201 has the function of making a request  
to ASP server 230 operated by the financial institution  
through network 220 for information on business activities  
20 of the examinee stored on ASP server 230. Information  
receipt section 202 has the function of receiving contents  
sent from ASP server 230 through network 220. Request  
receipt section 203 has the function of receiving a  
request for new loan sent from terminal 210 of the  
25 examinee through network 220. Sending section 204 has the  
function of sending the determination result of whether

the requested loan can be offered or not to terminal 210 of the examinee through network 220. Terminal 200 of the financial institution further includes display 208 such as a CRT (cathode ray tube) or liquid crystal display (LCD) and input device 209 such as a keyboard or mouse. The information on business activities received from ASP server 230 and the information on the request for new loan from the examinee are displayed on display 208. Request section 201 requests ASP server 230 to send the information on business activities of the examinee through operations of input device 209.

While each of request section 201, information receipt section 202, request receipt section 203, and sending section 204 may be formed of hardware, the processing thereof is typically realized by a program executed on a computer constituting terminal 200 of the financial institution. In this case, the functions of terminal 200 of the financial institution herein described are realized by reading the program from a recording medium having the program recorded thereon such as a magnetic recording medium, optical disc, or semiconductor memory onto the computer constituting terminal 200 of the financial institution before execution of the program, or by downloading the program from a server or the like to the computer constituting terminal 200 of the financial institution through the network before execution of the

program on the computer.

Terminal 210 of the examinee includes data update section 211, request sending section 212, and determination acquiring section 213. Data update section 211 is provided for causing ASP server 230 to accumulate information on general business activities such as finance, accounting, sales, manufacturing and the like of the examinee through network 220, and has the functions of instructing ASP server 230 to add, update, or delete the information on business activities of the examinee stored on ASP server 230 and viewing the information on business activities of the examinee stored on ASP server 230. Request sending section 212 has the function of sending a request for new loan to terminal 200 of the financial institution through network 220. Determination acquiring section 213 has the function of acquiring the determination result of whether loan can be offered to the company sent from terminal 200 of the financial institution through network 220. Terminal 210 of the examinee further includes display 218 such as a CRT or liquid crystal display and input device 219 such as a keyboard or mouse. When data update section 211 adds, updates, deletes, or views the information on business activities stored on ASP server 230, the information on business activities is displayed on display 218. The determination result of whether loan can be offered to the

company from terminal 200 of the financial institution is also displayed on display 218. Input for adding, updating, deleting or viewing the information on business activities on ASP server 230 by data update section 211 is made  
5 through input device 219. Request sending section 212 sends a request for new loan to terminal 200 of the financial institution through operations of input device 219.

While each of data update section 211, request  
10 sending section 212, and determination acquiring section 213 may be formed of hardware, the processing thereof is typically realized by a program executed on a computer constituting terminal 210 of the examinee. In this case, the functions of terminal 210 of the examinee herein  
15 described are realized by reading the program from a recording medium having the program recorded thereon such as a magnetic recording medium, optical disc, or semiconductor memory onto the computer constituting terminal 210 of the examinee before execution of the  
20 program, or by downloading the program from a server or the like to the computer constituting terminal 210 of the examinee through the network before execution of the program on the computer.

ASP server 230 operated by the financial  
25 institution includes storage section 231 for storing information on business activities of each examinee, data

update section 232, and data sending section 233. Data  
update section 232 has the functions of storing  
information on general business activities sent from  
terminal 210 of the examinee into storage section 231,  
5 changing information on business activities stored in  
storage section 231, or providing information on business  
activities for terminal 210 of the examinee, in accordance  
with instructions (for storage, change, or view) from  
terminal 210 of the examinee. While storage section 231  
10 has information on business activities of a plurality of  
examinees stored therein, one of the examinees must be  
prohibited from accessing information on business  
activities of another examinee. For this reason, data  
update section 232 also performs access control such that  
15 terminal 210 of an examinee can access only information on  
its own business activities. Data sending section 233 has  
the function of sending, in response to a request from  
terminal 200 of the financial institution, requested  
information on general business activities of the examinee  
20 to terminal 200 of the financial institution.

The processing in ASP server 230 is typically  
performed by a program executed on a server computer.  
Storage section 231 is realized as a mass storage unit  
provided on the server computer. Data update section 232  
25 and data sending section 233 are realized by a program  
which performs processing therefor. The functions of ASP

server 230 herein described are realized by reading the program from a recording medium having the program recorded thereon such as a magnetic recording medium, optical disc, or semiconductor memory onto the server computer constituting ASP server 230 before execution of the program, or by downloading the program from a server or the like to the server computer constituting ASP server 230 through the network before execution of the program on the computer.

Next, the procedure of the loan examination according to the embodiment is described with reference to Fig. 4. The following description is made assuming that network 220 is the Internet.

At step B1, employees in departments such as a finance department, accounts department, sales department, and manufacturing department of the examinee record, as their jobs, information on general business activities in the past on ASP server 230 operated by the financial institution through network 220 by using terminal 210 of the examinee placed in the respective departments. At this point, each employee in each department performs the recording as a task on an EDP (Electronic Data Processing) environment of his or her own company without particular consciousness of the location or operator of ASP server 230. Each employee in each department of the examinee adds information on current general business activities to

ASP server 230 through network 220 one by one as his or her job at the proper time of update by using terminal 210 of the examinee placed in each department.

At step B2, each employee in each department of the  
5 examinee updates, deletes, or views information already stored on ASP server 230 as required in business of each department. At this point, each employee in each department performs the update, deletion, or view of the information as a task on an EDP environment of his or her  
10 own company without particular consciousness of the location or operator of ASP server 230.

Assume herein that a motivation for requesting new loan occurs in the examinee. In response thereto, at step B3, a person authorized to apply for loan in the examinee  
15 sends a request for new loan to terminal 200 of the financial institution through network 220 from terminal 210 of the examinee.

At step B4, upon receipt of the request for a new loan, a person in charge in the financial institution  
20 views the information on general business activities such as finance, accounting, sales, and manufacturing of the examinee stored on ASP server 230 through network 220 from terminal 200 of the financial institution to perform a loan examination. At this point, data usable for the loan  
25 examination by the financial institution can include not only information scheduled to be included in a financial



accounting report but also a wide variety of information on business activities such as finance, accounting, sales, and marketing. It is thus possible to use predicted performance of the company in the future such as sales  
5 schedules from the next term onward as a factor in the determination in the loan examination. At step B5, the person in charge in the financial institution performs a further loan examination by considering information on the examinee obtained in a manner other than through ASP  
10 server 230 such as known information to make a final determination of whether the loan can be offered, and notifies terminal 210 of the examinee of the determination result of whether the loan can be offered.

As described above, according to the embodiment,  
15 the information on various business activities of the examinee, which could not be acquired conventionally by the financial institution, is stored on ASP server 230. The financial institution does not release the information on various business activities stored on ASP server 230 to  
20 the public but exclusively uses the information as reference information for determining whether it can offer the loan to the examinee. It is thus possible to realize improved accuracy of the loan examination in the financial institution.

25 According to the system, the financial institution can directly acquire grouped and correct information on

the examinee in a desired form and at a desired time.

Thus, the number of man-hours of employees is reduced in the financial institution and the examinee involved in the loan examination to allow a reduction in time taken for

5 the examination as compared with the conventional examination method when the same level of accuracy of the loan examination as the conventional method is maintained.

In addition, the examinee capable of presenting the information on business activities to the financial  
10 institution by using this system is thought to be regarded in the market as a company with no fraud, high clearness, and high credibility of a financial accounting report. Thus, it is expected that stocks, bonds and the like of the examinee are more highly regarded in the market.

15 While the aforementioned embodiment has been described with an example of a company being financed, a target for loan is not limited to such a company, and the system is applicable to various enterprises. The present invention is also applicable to a system for management  
20 diagnosis such as management analysis of an enterprise.

In other words, the present invention is not limited to the configuration of the aforementioned embodiment, and it goes without saying that various changes and modifications which may be made by those skilled in the art within the  
25 range of the present invention defined by the appended claims are included.